



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,857	09/12/2003	Loc X. Phan	018563-001140US	8643

46718 7590 02/08/2006

TOWNSEND AND TOWNSEND AND CREW, LLP (018563)  
TWO EMBARCADERO CENTER, EIGHTH FLOOR  
SAN FRANCISCO, CA 94111-3834

EXAMINER

O CONNOR, CARY E

ART UNIT

PAPER NUMBER

3732

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/660,857	<b>Applicant(s)</b> PHAN ET AL	
	<b>Examiner</b> Cary E. O'Connor	<b>Art Unit</b> 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>91004, 10903, 82205</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Double Patenting*

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 20 of copending Application No. 11/109,978 in view of Breads et al (5,059,118). The claims of the copending application do not include the limitations that the appliances comprise polymeric shells having cavities, wherein the cavities of successive shells have different geometries and wherein at least one appliance includes one or more receptacles to receive an attachment device. The claim also includes the limitation that the appliances are marked to indicate their order of use. Breads teaches a tooth repositioning system comprising a plurality of polymeric shells 20 each having a cavity different geometries (column 16, lines 38-45). Each polymeric shell includes receptacles 46 adapted to receive an attachment device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the appliances of the copending

application claims as taught by Breads, in order to transfer forces to the teeth in a more aesthetically pleasing manner than with conventional orthodontic brackets. As to claims 2-5 and 7-9, note that the attachment devices of Breads may be a preformed snap 178 or bracket 28. As to claims 6 and 7, the attachment devices of Breads are adhesively via a surface on the attachment device that faces outwardly of the receptacle. As to claims 10-14, the material used to form the attachment device and the methods by which they are placed on the dental are not given patentable weight in the claim because the attachment devices are not positively claimed.

This is a provisional obviousness-type double patenting rejection.

Claims 1-14, 16 and 17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 22 of copending Application No. 11/109,978 in view of Breads et al (5,059,118). The claims of the copending application do not include the limitations that the appliances comprise polymeric shells having cavities, wherein the cavities of successive shells have different geometries and wherein at least one appliance includes one or more receptacles to receive an attachment device. The claims also include the limitation that the appliances are enclosed in a package. Breads teaches a tooth repositioning system comprising a plurality of polymeric shells 20 each having a cavity different geometries (column 16, lines 38-45). Each polymeric shell includes receptacles 46 adapted to receive an attachment device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the appliances of the copending application claims

as taught by Breads, in order to transfer forces to the teeth in a more aesthetically pleasing manner than with conventional orthodontic brackets. As to claims 2-5 and 7-9, note that the attachment devices of Breads may be a preformed snap 178 or bracket 28. As to claims 6 and 7, the attachment devices of Breads are adhesively via a surface on the attachment device that faces outwardly of the receptacle. As to claims 10-14, the material used to form the attachment device and the methods by which they are placed on the dental are not given patentable weight in the claim because the attachment devices are not positively claimed.

This is a provisional obviousness-type double patenting rejection.

Claims 1-17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1,2 and 7 of U.S. Patent No. 6,554,611 in view of Breads (5,059,118). The claims of the copending application do not include the limitations that the appliances comprise polymeric shells having cavities, wherein the cavities of successive shells have different geometries and wherein at least one appliance includes one or more receptacles to receive an attachment device. The claims also include the limitation that the appliances are enclosed in a package. Claim 7 also includes the limitation that the appliances are marked to indicate their order of use. Breads teaches a tooth repositioning system comprising a plurality of polymeric shells 20 each having a cavity different geometries (column 16, lines 38-45). Each polymeric shell includes receptacles 46 adapted to receive an attachment device. It would have been obvious to one of ordinary skill in the art at the time the invention was

made to form the appliances of the copending application claims as taught by Breads, in order to transfer forces to the teeth in a more aesthetically pleasing manner than with conventional orthodontic brackets. As to claims 2-5 and 7-9, note that the attachment devices of Breads may be a preformed snap 178 or bracket 28. As to claims 6 and 7, the attachment devices of Breads are adhesively via a surface on the attachment device that faces outwardly of the receptacle. As to claims 10-14, the material used to form the attachment device and the methods by which they are placed on the dental are not given patentable weight in the claim because the attachment devices are not positively claimed.

Claims 1-16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2 and 9 of U.S. Patent No. 6,398,548 in view of Breads (5,059,118). The claims of the copending application do not include the limitations that the appliances comprise polymeric shells having cavities, wherein the cavities of successive shells have different geometries and wherein at least one appliance includes one or more receptacles to receive an attachment device. The claims also include the limitation that the appliances are enclosed in a package. The claims also include the limitation that the appliances are marked to indicate their order of use. Breads teaches a tooth repositioning system comprising a plurality of polymeric shells 20 each having a cavity different geometries (column 16, lines 38-45). Each polymeric shell includes receptacles 46 adapted to receive an attachment device. It would have been obvious to one of ordinary skill in the art at the time the invention was

made to form the appliances of the copending application claims as taught by Breads, in order to transfer forces to the teeth in a more aesthetically pleasing manner than with conventional orthodontic brackets. As to claims 2-5 and 7-9, note that the attachment devices of Breads may be a preformed snap 178 or bracket 28. As to claims 6 and 7, the attachment devices of Breads are adhesively via a surface on the attachment device that faces outwardly of the receptacle. As to claims 10-14, the material used to form the attachment device and the methods by which they are placed on the dental are not given patentable weight in the claim because the attachment devices are not positively claimed.

Claims 1-16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 11, 12 and 20 of U.S. Patent No. 6,398,548 in view of Breads (5,059,118). The claims of the copending application do not include the limitations that the appliances comprise polymeric shells having cavities, wherein the cavities of successive shells have different geometries and wherein at least one appliance includes one or more receptacles to receive an attachment device. The claims also include the limitation that the appliances are enclosed in a package. The claims also include the limitation that the appliances are marked to indicate their order of use. Breads teaches a tooth repositioning system comprising a plurality of polymeric shells 20 each having a cavity different geometries (column 16, lines 38-45). Each polymeric shell includes receptacles 46 adapted to receive an attachment device. It would have been obvious to one of ordinary skill in the

art at the time the invention was made to form the appliances of the copending application claims as taught by Breads, in order to transfer forces to the teeth in a more aesthetically pleasing manner than with conventional orthodontic brackets. As to claims 2-5 and 7-9, note that the attachment devices of Breads may be a preformed snap 178 or bracket 28. As to claims 6 and 7, the attachment devices of Breads are adhesively via a surface on the attachment device that faces outwardly of the receptacle. As to claims 10-14, the material used to form the attachment device and the methods by which they are placed on the dental are not given patentable weight in the claim because the attachment devices are not positively claimed.

Claims 1-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1,2 and 7 of U.S. Patent No. 6,554,611 in view of Breads (5,059,118). The claims of the copending application do not include the limitations that the appliances comprise polymeric shells having cavities, wherein the cavities of successive shells have different geometries and wherein at least one appliance includes one or more receptacles to receive an attachment device. Breads teaches a tooth repositioning system comprising a plurality of polymeric shells 20 each having a cavity different geometries (column 16, lines 38-45). Each polymeric shell includes receptacles 46 adapted to receive an attachment device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the appliances of the copending application claims as taught by Breads, in order to transfer forces to the teeth in a more aesthetically pleasing manner than with



conventional orthodontic brackets. As to claims 2-5 and 7-9, note that the attachment devices of Breads may be a preformed snap 178 or bracket 28. As to claims 6 and 7, the attachment devices of Breads are adhesively via a surface on the attachment device that faces outwardly of the receptacle. As to claims 10-14, the material used to form the attachment device and the methods by which they are placed on the dental are not given patentable weight in the claim because the attachment devices are not positively claimed.

Claims 1-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 17 of U.S. Patent No. 6,554,611 in view of Breads (5,059,118). The claims of the copending application do not include the limitations that the appliances comprise polymeric shells having cavities, wherein the cavities of successive shells have different geometries and wherein at least one appliance includes one or more receptacles to receive an attachment device. Breads teaches a tooth repositioning system comprising a plurality of polymeric shells 20 each having a cavity different geometries (column 16, lines 38-45). Each polymeric shell includes receptacles 46 adapted to receive an attachment device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the appliances of the copending application claims as taught by Breads, in order to transfer forces to the teeth in a more aesthetically pleasing manner than with conventional orthodontic brackets. As to claims 2-5 and 7-9, note that the attachment devices of Breads may be a preformed snap 178 or bracket 28. As to claims 6 and 7,

the attachment devices of Breads are adhesively via a surface on the attachment device that faces outwardly of the receptacle. As to claims 10-14, the material used to form the attachment device and the methods by which they are placed on the dental are not given patentable weight in the claim because the attachment devices are not positively claimed.

Claims 1 and 10-14 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 13 and 14 of U.S. Patent No. 6,705,863 in view of Adell (4,983,334). Adell teaches a tooth repositioning system comprising a plurality of polymeric shells each having a cavity different geometries (column 7, first paragraph). It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the appliances with differing geometries, in view of Breads, in order to reposition the teeth in gentler manner.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cary E. O'Connor whose telephone number is 571-272-4715. The examiner can normally be reached on M-Th 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:  
10/660,857  
Art Unit: 3732

Page 10

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Cary E. O'Connor  
Primary Examiner  
Art Unit 3732

ceo